5. On Crustaceans from the Mauritius.—Part II. By EDWARD J. MIERS, F.L.S., F.Z.S.

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(Plate XXXVI.)

Of the interesting Crustaceans of which I submit descriptions as a sequel to my former paper on Crustaceans received by the British Museum from M. V. de Robillard, the first to be mentioned, a Palinurus, was taken in a fishing-net at a depth of 40 fathoms. With it were sent, with other marine animals, a specimen of a species of Dromia (apparently D. vulgaris) completely covered with a sponge of the genus Dysidea; and also a specimen of Lysiosquilla maculata, one of the commonest and best-known of the Oriental Squillidæ, of which, however, there were previously no specimens from the Mauritius in the British-Museum collection, and which is marked as

"rare" by M. Robillard.

The Crawfish, of which a detailed description follows, and which belongs to the restricted genus Palinurus of Gray2, I regard as specifically identical with a West-Indian form long since described and roughly figured by Parra under the designation "Camaron de lo alto," which M. H. Milne-Edwards has briefly described as Palinurus longimanus from a West-Indian type in the collection of the Paris Museum. M. Guérin-Méneville also mentions this species, but without adding any thing to our knowledge respecting it; and yet more recently Dr. Edward v. Martens has published a few remarks upon a male example obtained at Cuba by Dr. J. Gundlach. Thus the West-Indian habitat of P. longimanus is established beyond question.

The original description of Parra, although of considerable length, is, as might be expected in so early a work, insufficient from a scientific point of view; but as far as it goes it is applicable in almost every particular to the species from the Mauritius. Nevertheless, as

I have already, Ann. & Mag. Nat. Hist. (ser. 5) v. p. 370 (1880), remarked

on the occurrence of this species in the Oriental region.

² I may observe here that Dr. G. Pfeffer, in a memoir on the Palinuridæ in the collection of the Hamburg Museum (Verhandl. des naturwissenschaftlichen Vereius von Hamburg-Altona, v. p. 30, 1881), has proposed for the subgenus *Panulirus* of Gray (ined.?) and Heller (1865), which includes by far the greater number of known Crawfishes, and has been generally adopted, the new designation Senex. This name cannot be adopted, having been long ago preoccupied in the class Aves; and I will add that, in my opinion, it would be productive of much inconvenience were a generic name liable to alteration merely because (as in the present instance) it is composed of the transposed letters of another name; to cite only one instance, it would then become necessary to name nearly all the older genera of Fish-lice (Cymothoidæ).

Descripcion de diferentes Piezas de Historia natural, &c., p. 154, pl. lv. fig. 1 (1787).

4 Histoire naturelle des Crustacés, ii. p. 294 (1837).

⁵ "Anim. Articulés," in R. de la Sagra's Hist. de l'île de Cuba, p. xciii (1857). ⁶ Archiv f. Naturgeschichte, xxxviii. p. 125 (1872).



Figs 2.3. PSEUDIBACUS PFEFFERI Fig:1 PALINURUS LONGIMANUS var. MAURITIANUS.



the figure showed distinct differences in the proportions of the penultimate joints and dactyli of the chelipedes, and in the coloration of the ambulatory legs, and as Milne-Edwards in his later diagnosis mentioned the existence of seven series of spines on the carapace, a character scarcely applicable to the specimen from the Mauritius, and also on account of the widely separated habitats of the two forms, I was at first inclined to regard the species as distinct. Before, however, applying a new specific name to the specimen from the Mauritius, I submitted a sketch of the chelipede and cephalothorax to Prof. A. Milne-Edwards, who very kindly compared them with the type of *P. longimanus* in the Paris collection, and sent me the following observations, with an outline drawing of the Paris type:—

"Le Palinurus longimanus (M.-Edwards) ressemble beaucoup à l'espèce qui a été trouvée au voisinage de l'île Maurice et dont vous m'envoyez un croquis. Il y a cependant quelques légères différences dans la disposition des épines. Vous pouvez en juger par le dessin où j'ai figuré la carapace du P. longimanus type de notre collection. En arrière de l'épine latérale postorbitaire il s'en trouve une seconde qui me paraît manquer sur l'exemplaire de Maurice. Le doigt de la main du Palinurus du Muséum de Paris est moins courbé, mais la forme du membre est bien la même. Ce sont, comme vous

voyez, de bien petits différences."

These remarks and the figures so courteously sent leave no doubt in my mind as to the specific identity of the two forms. The spine behind the lateral postorbital spine, which was not represented in the sketch sent to M. Milne-Edwards, is distinctly developed on one (the left) side only of the Mauritius specimen, where, however,

it is very small.

As no sufficient description or accurate figure has as yet appeared of this *Palinurus*, which is certainly one of the most remarkable described, those which are now given will not be without interest; and the minor distinctions referred to below will, I think, justify me in considering the Mauritius specimen as belonging to a distinct variety—the more so as this is, I believe, the first recorded instance of a Crustacean from the Mascarene subregion being specifically identical with one from the West Indies, unless, indeed, certain species having an almost cosmopolitan distribution are to be excepted. This, moreover, is in itself a fact of much interest on account of the well-known affinities that exist between the Mascarene and South-American fannas.

Whether *P. longimanus* is to be regarded as an instance of a once widely-spread species surviving to the present period in these widely distant and isolated localities, or whether further researches will demonstrate its existence at Cape Verd or on the western coast of Africa (whence it may have passed round the Cape of Good Hope into the Oriental region), time only will show. Certain it is that it differs widely from the typical *Palinuri* in the remarkable development and dilated palms of the anterior legs, which may be taken by some zoologists as indicative of an affinity with the Astacina.